LIST OF CURRENT CLAIMS

Claims 1-15 (Canceled)

16. (Currently Amended) A portable data carrier capable of authentication by means of biometric data, comprising a memory in which at least two sets of biometric reference data each belonging to a different system for biometric authentication are stored, and wherein the different sets of reference data are generated from biometric data of one and the same biometric feature using different algorithms.

17. (Currently Amended) A terminal for authentication by means of biometric data comprising a sensor arranged to detect a biometric feature, an I/O device for transferring data, and a control and data processing unit which is arranged to convert biometric data from the sensor which were derived from one and the same detected biometric feature into comparative data by an algorithm, wherein at least two different algorithms are used to convert said biometric data from the sensor into said comparative data, each of said different algorithms belonging to a different system for biometric authentication.

18. (Currently Amended) A biometric authentication device comprising:

a portable data carrier capable of authentication by means of biometric data comprising a memory in which at least two sets of biometric reference data are stored each belonging to a different system for biometic authentication, and wherein the different sets of reference data are generated from biometric data of one and the same biometric feature using different algorithms;

a terminal for authentication by means of biometric data comprising a sensor arranged to detect at least one biometric feature, an I/O device for transferring data, and a control and data processing unit which is arranged to convert biometric data from the

sensor which were derived from one and the same detected biometric feature into comparative data by an algorithm, wherein at least two different algorithms are used to convert said biometric data from the sensor into comparative data;

wherein said reference data are transferred by the I/O device from the data carrier to the terminal, and

wherein the control and data processing unit are arranged to check the reference data for a match with the comparative data.

19. (Previously Presented) The authentication device according to claim 18, wherein the comparative data are transferred by the I/O device from the terminal to the data carrier; and

the data carrier includes a control and data processing unit arranged to check the reference data for a match with the comparative data.

20. (Previously Presented) The authentication device according to claim 18, wherein the portable data carrier is a smart card.

21. (Previously Presented) The authentication device according to claim 18, wherein the sets of reference data and the algorithms used for generating the sets of comparative data have a characteristic identification, and wherein reference data and comparative data with the same identification are checked.

22. (Previously Presented) The authentication device according to claim 18, wherein the detected biometric feature is selected from the group consisting of iris, retina, face, speech, fingerprints and a signature including the writing dynamics determined during signing.

23. (Currently Amended) A method for authentication by means of biometric data comprising the steps:

deriving and storing several sets of reference data from biometric data of one and the same detected biometric feature using different algorithms each belonging to a different system for biometic authentication;

detecting biometric data;

converting the detected biometric data into comparative data by an algorithm; and

comparing the stored reference data with the converted comparative data for an authentication.

24. (Previously Presented) The method according to claim 23, wherein the step of converting detected biometric data into comparative data is carried out by using at least two different algorithms.

25. (Previously Presented) The method according to claim 23, wherein the reference data and/or comparative data or the algorithms generating them have an identification, and only the stored reference data are compared with converted comparative data which have the same identification or only comparative data are converted from the detected biometric data by the algorithm which has the same identification.

26. (Previously Presented) The method according to claim 23, wherein the detected biometric feature is selected from the group consisting of iris, retina, face, speech, fingerprints and a signature including the writing dynamics determined during signing.

27. (Previously Presented) The method according to claim 23, wherein several different sets of reference data are derived and stored, and several different sets of comparative data have been converted from detected biometric data, and wherein the several different sets of reference data are compared with the several different sets of comparative data for authentication.

28. (Previously Presented) The method according to claim 27, wherein the different sets of reference data and the different sets of comparative data are derived and converted from biometric data of the same kind which have been converted by different algorithms.

29. (Previously Presented) The method according to claim 27, wherein the conversion of the different sets of reference data and comparative data starts out from different biometric data which have been converted by the same or by different algorithms.

30. (Previously Presented) The method according to claim 27, wherein upon comparison of several different sets of reference data with several different sets of comparative data, the authentication is decided positively if the majority of comparisons are positive.

31. (Previously Presented) A terminal according to claim 17, wherein the detected biometric feature is selected from the group consisting of iris, retina, face, speech, fingerprints and a signature including the writing dynamics determined during signing.

32. (Previously Presented) A portable data carrier according to claim 16, wherein the portable data carrier is a smart card.

33. (Previously Presented) A portable data carrier according to claim 16, wherein the detected biometric feature is selected from the group consisting of iris, retina, face, speech, fingerprints and a signature including the writing dynamics determined during signing.